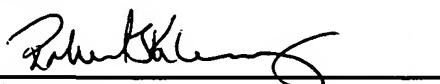


FORM PTO-1390 (REV. 1-98)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY OR AGENT DOCKET NUMBER
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371				1415 US/PCT
INTERNATIONAL APPLICATION NO. PCT/US03/32427		INTERNATIONAL FILING DATE OCTOBER 14, 2003		U.S. APPLICATION NO. (If known, see 37 CFR 1.5 10/533921
TITLE OF INVENTION PERMEABLE REFRACTORY MATERIAL FOR A GAS PURGED NOZZLE		PRIORITY DATE CLAIMED OCTOBER 16, 2002		
APPLICANT(S) FOR DO/EO/US DESAI et al.				
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:				
<ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. 3. <input type="checkbox"/> This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1). 4. <input checked="" type="checkbox"/> A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date. 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) <ol style="list-style-type: none"> a. <input checked="" type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau). b. <input checked="" type="checkbox"/> has been transmitted by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input type="checkbox"/> A translation of the International Application into English (35 U.S.C. 371(c)(2)). 7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ol style="list-style-type: none"> a. <input type="checkbox"/> are transmitted herewith (required only if not transmitted by the International Bureau). b. <input type="checkbox"/> have been transmitted by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. <input type="checkbox"/> A translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). 				
Items 11. to 16. below concern document(s) or information included:				
<ol style="list-style-type: none"> 11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input checked="" type="checkbox"/> A FIRST preliminary amendment. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment. 14. <input type="checkbox"/> A substitute specification. 15. <input type="checkbox"/> A change of power of attorney and/or address letter. 16. <input checked="" type="checkbox"/> Other items or information: <ul style="list-style-type: none"> Return Receipt Postcard Certificate of Express Mailing (Post Office to Addressee) Power of Attorney Document Authorization to Charge Deposit Account Document Petition For Revival Application Forms <p><i>COPY OF THE INTERNATIONAL SEARCH REPORT</i></p> <p><i>COPY OF THE INTERNATIONAL EXAMINATION REPORT</i></p> <p><i>COPY OF THE APPLICATION AS ORIGINALLY FILED</i></p> 				

U.S. APPLICATION NO. (if known) 10/53392		INTERNATIONAL APPLICATION NO. PCT/US03/32427	ATTORNEY'S DOCKET NUMBER 1415 US/PCT
17. <input checked="" type="checkbox"/> The following fees are submitted:		CALCULATIONS PTO USE ONLY	
BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)):			
Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO \$1070.00			
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO \$930.00			
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO \$790.00			
International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) \$720.00			
International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) \$98.00			
ENTER APPROPRIATE BASIC FEE AMOUNT =		\$	950.00
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).		\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE
Total claims	- 20 =		x \$22.00
Independent claims	- 3 =		x \$82.00
MULTIPLE DEPENDENT CLAIM(S) (if applicable)		+ \$270.00	
TOTAL OF ABOVE CALCULATIONS =		\$	
Reduction of 1/2 for filing by small entity, if applicable. A Small Entity Statement must also be filed (Note 37 CFR 1.9, 1.27, 1.28).		\$	
SUBTOTAL =		\$	
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).		\$	
TOTAL NATIONAL FEE =		\$	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +		\$	
TOTAL FEES ENCLOSED =		\$	950.00
		Amount to be refunded:	\$
		charged:	\$ 950.00
<p>a. <input type="checkbox"/> A check in the amount of \$ _____ to cover the above fees is enclosed.</p> <p>b. <input checked="" type="checkbox"/> Please charge my Deposit Account No. <u>22-0281</u> in the amount of \$ <u>950.00</u> to cover the above fees. A duplicate copy of this sheet is enclosed.</p> <p>c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>22-0281</u>. A duplicate copy of this sheet is enclosed.</p>			
<p>NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.</p> <p>SEND ALL CORRESPONDENCE TO:</p> <p><u>VESUVIUS</u> ATTN: <u>ROBERT S. KLEMZ, JR.</u> <u>27 NOBLESTOWN ROAD</u> <u>CARNEGIE, PA 15106-1632</u></p>			
 <p>SIGNATURE <u>Robert S. Klemz, Jr.</u></p> <p>NAME <u>46,305</u></p> <p>REGISTRATION NUMBER</p>			

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of) DESAI et al.
)
Title) PERMEABLE REFRACTORY MATERIAL
) FOR A GAS PURGED NOZZLE
)
Attorney Docket No.) 1415 US/PCT

To: Commissioner for Patents
Mail Stop PCT
P.O. Box 1450
Alexandria, VA 22313-1450

Express Mail Certificate

Date of Deposit: MAY 4, 2005

To: Commissioner for Patents

I hereby certify that this correspondence is being deposited with the United States Postal Service as "Express Mail Post Office to Addressee" under 37 C.F.R. 1.10 on the date indicated above and was addressed to the Commissioner for Patents, Mail Stop PCT, P.O. Box 1450, Alexandria, VA 22313-1450.

Express Mail number ED 213434068 US

Thomas C. Dunford

Signature of person mailing correspondence

Thomas C. Dunford
Name of person mailing correspondence

10/533921

JC10 Rec'd PCT TO 04 MAY 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of) DESAI, Priyadarshi Gautam
)
Title) Permeable Refractory Material For
) A Gas Purged Nozzle
)
Int'l Application Number) PCT/US03/32427
)
Int'l Publication No.) WO2004/035249 A1
)
Int'l Filing Date) October 14, 2003
)
Attorney Docket No.) 1415 US

To: Mail Stop PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AUTHORIZATION TO CHARGE DEPOSIT ACCOUNT

The Commissioner is hereby authorized to charge the appropriate petition fee under 37 CFR 1.17(m) (\$1500.00) for the enclosed Petition For Revival of an International Application Designating the U.S. Abandoned Unintentionally under 37 CFR 1.137(b), as well as any additional necessary fees, to deposit account number 220281. A duplicate copy of this letter is enclosed.

Date: May 03 2005

Respectfully submitted,

Vesuvius USA Corporation
27 Noblestown Road
Carnegie, PA 15106-1632
Tel: 412-269-6921
Fax: 412-276-7252


Robert S. Klemz
Reg. No. 46,305